We claim:

1. A method for improving the efficiency of a wind turbine rotor, comprising the furnishing of the rotor blades with serrated trailing edges having a plurality of span-wise, periodic indentations, such that the serrations extend from the trailing edge into the airflow behind the trailing edge.

2. A method for improving the efficiency of a wind turbine rotor according to claim 1, wherein the serrations are provided as a retrofit of an existing wind turbine rotor by the attachment of a serrated panel to the surface of the wind turbine blade near the existing trailing edge and where the serrations extend from the existing trailing edge of the blade into the airflow behind the existing trailing edge.

3. A method for improving the efficiency of a wind turbine rotor according to claim 1, wherein the serrations are provided as part of a new blade.

4. A method for improving the efficiency of a wind turbine rotor according to claim 1, wherein the serrations are provided over a spanwise extent of the trailing edge having a length of between 30 and 100 percent of the radius of the blade.

5. A method for improving the efficiency of a wind turbine rotor according to claim 1, wherein the serrations are provided in the form of saw teeth having approximately 60 degrees included angles between adjacent vertices.

6. A method for improving the efficiency of a wind turbine rotor according to claim 1, wherein the serrations are provided at an angle different from 0 degrees relative to the blade chord.

7. A method for improving the efficiency of a wind turbine rotor according to claim 6, wherein the angle of the serrated part changes passively in response to the speed and angle of the air flow at the trailing edge of the blade due to the flexing of the serrations and/or the serrated panel.

8. An apparatus for improving the efficiency of a wind turbine rotor, comprising a serrated panel having an upper and a lower surface and a plurality of span-wise, periodic indentions, and means for connecting the serrated panel to the trailing edge of the blades comprising the wind turbine rotor such that the serrated panel extends from the trailing edge into the airflow behind the trailing edge of the blade.

9. An apparatus for improving the efficiency of a wind turbine rotor according to claim 8, wherein the serrations have a spanwise extent of the trailing edge having a length of between 30 and 100 percent of the radius of the blade.

10. An apparatus for improving the efficiency of a wind turbine rotor according to claim 8, wherein the serrations have the form of saw teeth having approximately 60 degrees included angles between adjacent vertices.

11. An apparatus for improving the efficiency of a wind turbine rotor according to claim 8, wherein the part of the serrated panel serrations have the form of saw teeth having

approximately 60 degrees included angles between adjacent vertices.

12. An apparatus for improving the efficiency of a wind turbine rotor according to claim 8, wherein the serrations have an angle different from 0 degrees relative to the mounting surface on the blade.

13. An apparatus for improving the efficiency of a wind turbine rotor according to claim 12, wherein the serrations and/or the serrated panel are manufactured with a given stiffness that allows the angle of the serrated part to change passively in response to the speed and angle of the air flow at the trailing edge of the blade due to the flexing of the serrations and/or the serrated panel.